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## City Control of Airports Protected by CAA Efforts

Mainly through the efforts of the CAA many cities with landing areas now in military use know where they will stand when the war is over. They have contracts which assure them that they will regain control of their airports.

Since CAA intercession the War and Navy departments have been leasing airports on terms which take into consideration all sides of the picture—national defense, the conditions under which CAA can develop publicly owned airports, and the interests of city ownership.

When the Federal Government requests the lease of a CAA-developed airport for military use during the war, present contracts provide that the lease expire within 6 months after the end of the national emergency period unless extension is approved by the CAA.

### New Terms

Moreover, the lease includes provisions obligating the Government to share in the maintenance cost of the landing area in proportion to its military use, and a nominal rental is paid. Commercial, private and other non-military aircraft are permitted to use a leased airport as long as they do not interfere with military operations. On the other hand, the Government may use an unleased airport without charge if the extent of the use does not interfere with nonmilitary operations.

Before agreement on these terms was reached, airports could be taken over without lease or arrangement of any kind under the Second War Powers Act of 1942. While the cities owning the airports recognized the military move as necessary to national defense, they were left in a state of uncertainty

about the future, and with problems that needed adjusting.

### Los Angeles Case

Some of these difficulties are illustrated in the case of the Los Angeles airport, which the Army took over without lease or negotiations. Questions arose about compensation, control of the airport by the city's appointed manager, and damages to the airport and its facilities during the period of its use by the Army. At the time, the Army took the position that the Government should not be called upon to pay any compensation for the use of any municipal airport and suggested that the Government would take over the air-

(See Airports, page 75)

## Asks for Short-Haul Service by Helicopter

Skyway Corporation of Providence, R. I., has filed an application for a certificate with the Board in which it proposes short-haul transportation by helicopter between communities near one another in Connecticut, Massachusetts, New Hampshire, New York, and Rhode Island, using either land or water areas for ports.

Skyway's plan is to furnish rapid service over relatively short distances as a supplement to long-distance transportation.

The Board has now received five applications which mention the helicopter as the type of plane to be used in carrying mail, passengers, or property. Two of the applicants are individuals: Angeline Harris and Wm. B. Allen. Three are airline companies: Philadelphia & Eastern, Northeast Airlines, and Skyway Corporation.

## Civil Air Patrol Is Transferred to War Department

The Civil Air Patrol, first established as a division of the Office of Civilian Defense, December 1, 1941, has been transferred to the War Department by order of the President, and is now an auxiliary of the Army Air Forces.

It is expected that the activities of the CAP will be continued in all phases, and will be conducted in about the same way that they were under OCD. But the Patrol will be on a better status and the work will be broadened.

From the early stages, CAP work has been more or less directly connected with the Army Air Forces so that the transfer seemed to be in order and was made with the consent of the OCD.

### Job Well Done

Under the established set-up, each of the 48 states has a wing command which is composed of local squadrons and flights in more than 1000 communities. CAP has enlisted nearly 80,000 citizens, and has also organized more than 20,000 cadets of high school age.

The wings function as aerial home guards with units trained and equipped to be ready for any emergency. In addition CAP has carried on operations for the Army consisting of coastal patrol, liaison patrol, and courier service. These operations are being conducted all over the country.

Robert Lovett, Assistant Secretary of War for Air, in commenting on the transfer to War Department control, congratulated the CAP on a job well done and stated that the transfer was motivated by the desire to make the Civil Air Patrol more directly available to perform its services for the armed forces. "The War Department," he said, "is glad to welcome this new auxiliary."

# CAA Confers With Teachers, Students As First Preflight School Year Ends

A large number of high school students have just finished their first course in preflight aeronautics. Now, the CAA and the American Council on Education are cooperating in holding clinics throughout the country where they can meet and talk with preflight teachers and students and find out what they want and need.

In the following statement, Bruce Uthus, in charge of the CAA Preflight Program, sums up the program's first year and describes the meetings with teachers and students.

"In September 1942, American secondary schools offered a new and untried subject: preflight aeronautics. To the satisfaction of the Civil Aeronautics Administration which sponsored the program, more than half of the high schools have already made a place for aviation in their crowded curricula, and some 250,000 youth between the ages of 16 and 18 are nearing the completion of a 1-year course in elementary ground school subjects.

"Now as this trail blazing school year closes, it is important to know the strength, deficiencies, and problems which have confronted the administrators, instructors, and students who have been pioneers in the project.

## To Make Study

"To this end the CAA has arranged with the American Council on Education to make an evaluation study of the past year's experience to find the answers to some of the following questions: How adequate are available teaching materials? Laboratory facilities? Equipment? What additional facilities peculiarly adapted to the teaching of aeronautics are desirable? Is the course too comprehensive? Too short? Too difficult? Too easy? What educational and age prerequisites should be established for enrollment in preflight aeronautics? Does the course have vocational appeal? Value as general education?

"These and numerous other questions are expected to be more definitely answered by conferences, clinics, and statistical analyses now under way with students, teachers, school administrators, and teacher training authorities.

## First Clinic

"The first of these clinics, recently held in Richmond, Va., has already demonstrated the value and possibilities of this grass roots' approach to these questions. A group of teachers, selected from large and small communities of Virginia, met with representatives of the CAA, the American Council on Education, and the Department of Public Instruction of Virginia. These teachers who last year were suddenly thrust onto the firing line in a new subject field pointed out from

their year's experience, the problems, strength, weaknesses, and requirements of the preflight courses in their schools. The students who met in separate conferences were enthusiastic about this new course and offered some excellent criticisms. Above all, they wanted more aviation equipment and demonstration devices.

"Similar clinics are being held in many regions of the country. These conferences, besides giving a valuable basis for plans to improve the service of CAA to aviation education, are tending to substantiate the hopes which originally prompted the Civil Aeronautics Administration to sponsor the preflight program. Teachers are revealing intelligent enthusiasm for the course, tempered and qualified by realistic suggestions for clearer definitions of aims, more teachably organized instructional materials, and fuller opportunities for direct contact with real aviation situations. They recognize their own present limitations in training and are eager to fill the gaps.

## Students Want More Work

"More high school youth wish to enroll than the present restricted facilities of schools can accommodate. Those who have taken the preflight course want longer periods and more problems, truly a revolutionary change in the average student's previous approach to his high school program. It illustrates that young people are not averse to working strenuously in a course which is functional, interesting, practical, and realistic.

"State education officials say that in addition to its specific contribution to military and civil aviation, preflight aeronautics is proving itself an excellent educational vehicle. Mathematics and physics are being absorbed with avidity. The student sees the practical use of these tools when applied to solving the relationships existing in aeronautics.

"It is hoped that by intelligent guidance and understanding it will be possible to make aviation education and training an integral part of the American educational pattern and thus produce larger and larger segments of our youthful population prepared to participate in the development of aviation. In addition, it is hoped that through this medium there will be created an air-sophisticated public which can understand and wisely deal with impacts which the airplane is having and will have on our social, economic, and political life.

## World Wide System

Five new super-power CAA ultra-high-frequency radio stations, strategically located, now can reach Uncle Sam's aircraft anywhere on the globe.

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## Weather Hazard Analyzed in CAB Safety Bulletin

An up-to-the-minute exploration of a meteorological unknown—the area in and around thunderstorms—is presented in recently issued Bulletin No. 154 of the Civil Aeronautics Board's Safety Bureau.

Entitled "Thunderstorm Characteristics and Flight Procedures," the bulletin is 23 pages long and illustrated. It was taken from an article prepared by J. A. Browne, Chief Meteorology Instructor of the Flight Training School, Transcontinental & Western Air, Inc.

The treatment of thunderstorm characteristics is divided into three parts. Part I, General Discussion, describes the characteristics common to all thunderstorm types, potential hazards and recommended flight procedures. Part II, Stability and Instability, presents a brief review to this subject and its application to thunderstorm forecasting. Part III, Thunderstorm Types, discusses general types and suggests flight procedures supplementary to those described in Part I.

Free copies of the bulletin may be obtained by writing to the CAA's Correspondence Section, Washington, D. C.

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# Aviation Gas Tax Pays For Projects In Tennessee

An exhibit of the valuable results which can be achieved through state promotion of aviation is the record of success of the Tennessee Bureau of Aeronautics.

As one of its projects, the Bureau some time ago undertook to brighten the bleak picture for women who would wear wings during wartime. It conducted a 15-week course for training women as flight instructors which ended with the graduation of 10 girls as fully qualified instructors.

The course was conducted at Nashville, under the direction of Phoebe Omie, veteran woman pilot and air education specialist, lent to the state by the CAA. The graduates came out so fully qualified and their services were in such great demand that the state believes its program has been fully justified. It has therefore urged the Federal Government to consider the institution of a national program for training women instructors.

## Air Projects

The instructor-training project is just one of many which have been carried on by the state Bureau since its creation in 1937. Funds for its work come out of tax money paid by aviators on gasoline. This tax is 7 cents on a gallon, and half of it is given to the airport where it is paid in, and the remainder goes to the Bureau. This has made possible self-sustaining municipal airports throughout the state, a statewide program of air marking, aviation education projects in every county in the state, production of textbooks, and, as the latest project, a course in airport management at the University of Tennessee at Knoxville.

Present income of the Aeronautics Bureau is more than \$200,000 a year, all of which is being used to improve facilities for the military, private and airline fliers who travel within and over Tennessee, and to continue the introduction of aviation subjects in the school curricula.

In an effort to graphically illustrate the success of the state's program, Tennessee is producing a movie short to tell its story. The 16-mm. sound movie will soon be made available on a loan basis to groups wishing to show it throughout the United States. For complete details write to W. Percy McDonald, Commerce Title Building, Memphis, Tenn. Mr. McDonald is a member of the Aeronautics Bureau.

## Airways Cut in Half

Civil airways have been cut from 20 miles to 10 miles in width by the CAA in order to give the armed forces more room for training purposes. The designation of the new width became effective April 1.

## Outstrips Auto Industry

In a recent release covering all phases of American air transport, OWI reports that during 1943 the aviation industry has grown into a 20-billion-dollar business. It outstrips by far the automobile industry which at its peak in 1941 reached only \$3,700,000,000.

Based on the sober estimates of civil and military aeronautics experts, OWI outlines an air future in which the United States will have over half a million planes on the "road" within the next decade. Air travel will take over about 70 percent of the present-day Pullman rail travel, all long-haul first class mail will go by air, and there will be regular air freight lines, with feeder air lines to smaller cities and pick-up service in the villages.

## Airports

(Continued from page 73)

port under condemnation proceedings before agreeing to compensation.

This left the City of Los Angeles in an awkward position since the authorities felt that condemnation proceedings would put them in the light of failing to cooperate with the national Government in its defense efforts. Extended negotiations were necessary before a lease was worked out upon a basis of a nominal consideration, with the agreement (which was at first vigorously opposed by the Army) that the Government would, upon the termination of the war, restore the airport to the condition existing upon the date of taking.

## Other Cities

A number of other cities had similar experiences in varying degrees of disruption of arrangements made with tenants and transportation companies. The municipal airports at Birmingham, Ala., Dallas, Tex., Jacksonville, Fla., Lincoln, Neb., and Louisville, Ky., were among those taken over by the Army, each for \$1 a year. Oklahoma City turned over to the Army its airport and approximately 2,700 adjacent acres. Jackson, Miss., after enlarging and improving its airport at the cost of \$112,500, turned it over to the Army without compensation.

The CAA, for its part, was concerned about the restoration of airports developed under the CAA program to civilian control after the war, since use of appropriations for this purpose calls for civilian control of the port's landing area during a substantial part of the life of the improvements made with these funds. While the CAA airport development appropriations are being used to build or improve airports at sites selected by the Army and Navy, it was necessary that a clear-cut understanding be reached as to what would happen after the war.

# CAA to Reduce Reservists Group To 7000 Trainees

A large number of air corps enlisted reservists will be released from the group of around 13,000 men selected last fall for training as non-combat pilots by the CAA War Training Service, according to an announcement by WTS. Plans are being made, however, to complete the training of those who have already passed through one course of pilot training.

The CAA finds itself with more enlisted reservists than it will be able to carry through all stages of non-combat pilot training within the next 12 months. The supply of civilian aircraft suitable for advanced pilot training is limited. Also, CAA has a full-time job in giving elementary flight instruction to Army and Navy cadets.

The non-combat men were enlisted for training as Army instructors, CAA instructors and transport pilots. The Army is now able to train men from its own ranks to fill these positions.

## Four Choices

The reservists who have enrolled for training have four choices open to them. Those between 18 and 26 may apply for aviation cadet training. If qualified, WTS trainees will be given priority in assignment to classes and will be called to active duty with the Army Air Forces.

They may apply for active duty with the AAF in an enlisted status. After completion of basic military training, qualified trainees may be assigned to instruction in an air force technical or aerial gunnery school, with application for officer candidate school open after three months.

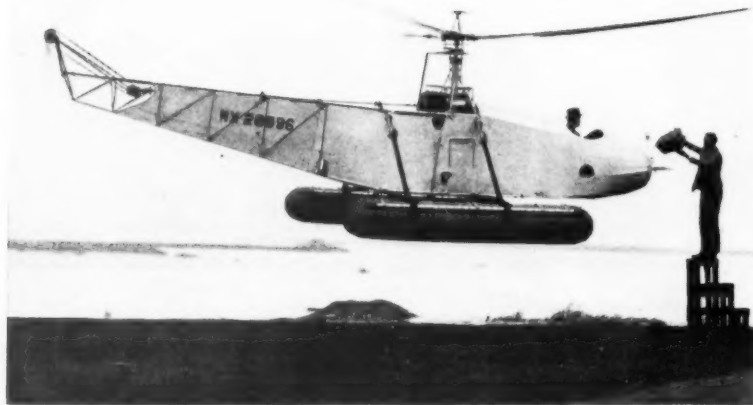
They may request discharge from the air corps enlisted reserve and return to civilian life. Men who are discharged will necessarily come under the jurisdiction of their local selective service boards.

## Will Keep 7000

Of the men who have already passed one course of pilot training, 7000 have a good chance of completing their training with CAA. Those who choose to stay on must first pass the AAF physical examination for pilots. If more than 7000 men remain after this physical screening, a further screening will sift out the trainees according to age and qualifications.

The men who are retained with CAA War Training Service will be carried through all CAA pilot training courses. The graduates will be assigned to the Army Air Forces central instructor school at Randolph Field. Others, before going there, may be employed for a while as instructors with the WTS. While undergoing training the men will receive \$50 a month.

CAA reservists' training is divided into five 8-week courses: elementary, secondary, cross-country, Link trainer and secondary instructor.



The helicopter jockeys up to a man to pick up a parcel (could very easily be a mail bag). Mr. Sikorsky is in the driver's seat.

## Sikorsky Helicopter— The Air World's Runabout?

Will the mechanical "dragonfly" become the flying "flivver" or light delivery truck of the post-war air world? Confidence that such may be the case is recorded in the fact that five applicants have applied to the Civil Aeronautics Board for permission to operate scheduled air service with helicopter equipment. The applicants propose regular service on routes running through eastern states.

While big things are expected of the helicopter, attempts at picturing the exact nature of its utility in the scheme of civil aviation are premature prophesy. It is believed that the potentialities of the helicopter are most objectively expressed by its achievements thus far so the Journal has gathered some information about the experimental model of the Sikorsky helicopter, the VS-300.

## Accurate Control At Low Speeds

The helicopter can rise or descend vertically, with absolutely no ground run, and can rise or descend on an inclined plane varying from 0° to 90° and can be flown backwards or sideways as well as forward. It can hover over a spot for any length of time and has been flown in driving rain, practically zero visibility, and gusty winds as high as 45 miles per hour. This type of helicopter has been flown at altitudes of several thousand feet but its inventor claims that its ceiling in forward flight is double or triple the altitude already recorded.

*Two in every garage?*—With an eye toward "roadability," or the day when a helicopter can be kept in the family garage, Sikorsky has conducted tests with a twin-blade rotor in place of the three-bladed arrangement. With a twin-blade rotor the blades could be stopped longitudinally and the craft would take up no more room than the length of its fuselage and the width of its landing gear. The two-bladed helicopter has proved quite airworthy but of course further tests are being made.

*Comparative performance*—It has outstripped the performance of other aircraft and surface craft in that it has proved itself capable of maneuvering with micrometric precision in the air and also on the surface of the water at speeds from zero to 80 miles per hour.

*Safety factors*—The rotors of the craft are connected with the power plant through a free-wheeling unit, which automatically goes into operation in case of engine failure. If you're up there and the engine quits, the blade pitch is reduced to the autorotative range and the blades continue to rotate, thus providing a sustained and controlled glide for the craft, and you simply sink down to earth in a gentle landing. This differs radically from a standard plane in which engine failure usually means a crack-up, or at best a



Showing how the helicopter might land on the rooftop of a house or post office, here's the VS-300 atop a clump of aircraft engine boxes, straddling the cracks between them.



In case of a flat, the rotors become an aerodynamic jack. The above picture shows the helicopter hanging patiently in mid-air while the tire is being changed.



## Makes Backyard An Airport

difficult time getting the plane down in one piece.

The craft's rate of ascent or descent is determined by the amount of bite (pitch) put in the rotor blades. This is controlled by a lever from the driver's seat. This lever is synchronized with the engine throttle so that the bigger the bite the blades take out of the air the more engine power is transmitted to the blades. Control of upward or downward movement, according to Mr. Sikorsky, is possible down to the rate of 1 foot a minute.

**Directional control**—Control of the helicopter, forward, backward, or sideways, is achieved by tilting (changing the plane) of the main rotor. To adjust the main rotor the control stick is pushed in the desired direction and thus the rotor is made to bite into the air in that direction. The tail rotor supplies torque compensation as well as steering control and is operated by "rudder" pedals.

The present single, torque-compensating rear rotor has evolved in a little over 2 years from a three-armed tail arrangement which made the earlier, fabricless craft look like a flying power transmission line tower.

**Performance prophecy**—Helicopters have a lifting capacity of from 10 to 14 pounds per horsepower. Thus, a 120-150 horsepower helicopter would make a nice two-seater. An aerial taxi, conservatively envisioned by the helicopter's inventor as capable of hauling four people, by this standard would take a 250-300 horsepower engine.

Gas mileage of the helicopter can be expected to compare favorably with present automobiles. Would warming up the family helicopter for a ride somewhere result in a complaint from the neighbors for violation of an anti-noise ordinance? No; the craft's inventor believes the helicopter can be refined down to a comparatively noiseless machine.



The helicopter is shown delivering supplies. In the above picture the container is lowered on a rope while the aircraft hovers motionless overhead.



The helicopter demonstrates its ability to land in tight quarters. This "airport" is surrounded by high mud banks and the end of the "runway" is blocked off by river boats.



Like a mechanical "dragonfly" the ship can sit from pond to pond or scoot about on top of the water. It is more manageable than any standard type of pontoon-equipped aircraft.

## These Student Pilots, Passengers Killed or Injured; Planes Wrecked

### Student, Passenger Seriously Injured

John William Nelson and his passenger, James T. Smith, were seriously injured in an accident which occurred about one-half mile east of Concord, N. C., August 20, 1942. Nelson held a student pilot certificate. Smith was not certificated as an airman. The aircraft, a Piper J-2, received major damage.

Nelson secured clearance for a solo flight of 30 minutes duration, taxied to the north end of the north-south runway and turned the plane around. At this time an automobile drew up to the airplane and its driver, James T. Smith, got out and boarded the aircraft, occupying the front seat. The pilot then took off toward the south (the wind was northwest 10 miles per hour). Upon reaching an altitude of approximately 200 feet, the aircraft was turned 90° to the left, heading eastward and downwind. A steep turn to the right was then started and when approximately one-quarter of this turn had been completed, the aircraft was stalled and fell off into a right power spin. It struck the ground at an angle of approximately 45°.

Nelson stated that the aircraft and engine functioned normally and did not contribute to the cause of the accident; that in making the last turn a gust of wind struck the lowered wing causing the plane to go into a spin. He stated further that the passenger was a friend of Kirk, the co-owner of the plane, and that he and Kirk had made previous arrangements to take Smith for a ride. Dual controls were installed and operative.

**Probable cause.**—Inadvertent power spin at an altitude too low to effect recovery.

**Contributing factor.**—Inexperience.

### Show-off Pilot Seriously Injured

George Leslie Fetterly was seriously injured in an accident which occurred near Ontario, Canada, November 8, 1942. Fetterly held a student pilot certificate and had accumulated approximately 60 hours of flying time. The aircraft, an Aeronca C-3, was demolished.

Fetterly was cleared for a solo flight from Massena, N. Y., to Ogdensburg, N. Y. He stated that while flying at about 5,000 feet over Ogdensburg, preparing to circle the city prior to landing, he foolishly decided to cross the Canadian border and fly over the home of some friends. He circled the house

to attract his friends' attention, and then attempted to further impress them by rolling his wheels on their meadow. During this maneuver the right wing struck a fence post and the plane crashed a short distance beyond, on its nose and right wing.

In view of the pilot's statement, it is evident that there was no failure of any part of the aircraft.

**Probable cause.**—Failure to avoid obstruction while flying at an extremely low altitude.

**Contributing factor.**—Recklessness.

### Carburetor Icing Blamed in Crash

Roger DeForest Glasgow was seriously injured in an accident which occurred about 4 miles southeast of the Municipal Airport, Wooster, Ohio, October 21, 1942. Glasgow held a student pilot certificate and had flown approximately 30 hours, about 10½ of which were solo. He was enrolled in the Civilian Pilot Training Navy V5 elementary course. The aircraft, a Piper J3L-65, was demolished.

Glasgow was cleared for a solo flight to practice "8's" in the area southeast of Wooster Airport and took off at approximately 11:25 a. m. Around noon Pilot Walter Shuey, the only known witness to the accident, was flying nearby in another aircraft and saw Glasgow heading in an easterly direction at an altitude of from 300 to 400 feet, making what appeared to be a normal left turn. Shuey did not notice whether or not the engine was running at this time. He stated that the aircraft then started spinning to the left and had completed about 1½ turns of the spin when it struck the ground. The plane crashed on its nose and left wing and remained in that position with the tail extending upward, at an angle of about 60°. Shuey landed alongside the wrecked plane and removed the pilot from the wreckage.

Examination of the wreckage revealed no indication of failure of any part of the aircraft. The manner in which the propeller was broken indicated that no power was being developed at the time of impact. The ignition switches were found in the "on" position. Due to the serious injuries sustained by Pilot Glasgow, he was unable to recall any of the details regarding the flight. His instructor stated that before the take-off he had talked to Glasgow about the possibilities of carburetor ice and had checked to make sure that Glasgow could reach the heat control lever from the rear seat with his safety belt fastened. The carburetor heat control was found in the "off" position.

The weather was favorable for flight, with a 7 mile per hour wind from the

## Don't Go Up With Beginners It's Dangerous!

Approximately one-third of all of the persons killed or seriously injured in private flying in the United States in 1942, were pilots who had logged less than 50 hours, or passengers riding with such beginners. In private flying last year there were 266 serious accidents in which 220 persons were killed and 188 seriously injured. Of this number 111 were students, and 18 were passengers illegally riding with students.

Student pilots are forbidden by the Civil Air Regulations to carry any passenger other than a certified instructor. However, with a certain number of student pilots the desire to take their earth-bound friends aloft becomes a mania—and too many willing victims are crazy enough to accept or seek such flights. Accepting a ride with a student pilot is not only extremely dangerous but may cause him to lose his license.

### Can't Defy Gravity

The overambitious student pilot may defy section 20.720 of the flier's rule book, but he cannot defy the law of gravity. Air safety regulations have gone far toward making flying safe, but they cannot protect a student pilot, who by definition is just learning to fly, from his own lack of skill and experience. Nobody can protect him from his own recklessness, either, and most of the unnecessary low flying which transforms simple stalls into spins, and spins into crashes, is done by the fledgling fliers.

This does not mean, according to the statistics that the reckless pilots are young in years, for older neophytes as well as young seem to get an urge to circle a friend's house at the height of the eaves, or wave and shout to people on the ground, or play at diving on tillers of the fields—items which seasoned fliers scorn as childish, futile, and dangerous.

When invited to go for a ride ask your host what kind of pilot certificate he has. The person who flies with a student pilot or any pilot not certified for the type of flight and aircraft involved is just as foolish as the law-breaking pilot himself.

south. The exact ground temperature and dew point could not be determined; however, the temperature was estimated to have been in the low forties and pilots at the airport reported using carburetor heat to prevent icing.

**Probable cause.**—Inadvertent spin while maneuvering at altitude too low to permit recovery.

**Contributing factor.**—Partial or total loss of power, possibly due to carburetor icing.

## Pilot Skims Pond 3 Die; Plane Burns

Grady Ellis Mertz, Jr., and his passengers, Catherine Copeland and Edgar Whatley, were fatally injured in an accident which occurred about 12 miles east of Sandersville, Ga., October 24, 1942. Mertz held a student pilot certificate and had accumulated about 60 hours of flying time, 8 of which were dual. The aircraft, a Piper J5A, was destroyed by impact and fire.

Mertz, accompanied by his passengers, took off from the Washington County Airport, Sandersville, Ga. He was observed by the airport guard to turn northwest and head in the direction of Jordans Pond, a narrow body of water about 1½ miles in length. The shore line at the northwest end of this pond rises quite abruptly and is covered with trees approximately 75 feet in height. The airplane was next observed by two witnesses who were fishing in a small boat near the middle of the pond. Approaching from the southeast, the pilot glided close to the water and headed directly toward the boat. He then applied power, flew over the boat, and again skimmed low over the water. At the northwest end of the pond, the plane was zoomed upward in a climbing turn to the right, and stalled. It first struck a tree with the right wing tip, then dove into other trees, and immediately burst into flames.

Examination of the wreckage revealed little useful evidence, as it was almost completely destroyed by fire. It is not known whether or not Mertz had ever previously carried passengers. If not, the unfamiliar loading of the aircraft may have contributed somewhat to the stall.

**Probable cause.**—Stalling of aircraft following a steep, climbing turn at low altitude.

**Contributing factor.**—Recklessness and inexperience of pilot.

## Engine Fails In Take-off

Lawrence James Jones was fatally injured in an accident which occurred adjacent to the Municipal Airport, North Platte, Nebr., November 23, 1942. He held a student pilot certificate and had flown about 46 solo hours. The aircraft, an Aeronca K, was demolished.

Jones departed from the North Platte Airport on a local practice flight. The take-off was made in a westerly direction into a wind of 5 miles per hour. When the plane had reached an altitude of around 75 feet at a point just over the west end of the east-west runway, the engine stopped. Jones started a left turn in an apparent effort to get back into the airport, but the aircraft was stalled in the initial portion of the turn, and fell off to the left. It struck the ground on the left wing and nose, and came to a stop in a small ravine about 1,000 feet southeast of the point where the engine failed.

Examination of the wreckage revealed no indication of failure of any part of

## Foreign Carriers Get Temporary Air Permits In Caribbean Area

As an emergency measure to relieve the war traffic load in the Caribbean, five foreign air carriers have been granted temporary 6-month permits for transportation between Miami, Fla., the Caribbean area and Central America.

The action was taken after the Board found the traffic demands during the war too heavy for the existing Pan American service to handle, and that the foreign applicants could provide some relief without taxing United States domestic equipment.

The applications of two American domestic air carriers, Eastern Air Lines, and National Airlines were denied. The Board pointed out that these carriers could not provide the needed service in the Caribbean area without diverting widely needed flight equipment from their operations within the United States.

In issuing the permits to foreign air carriers the Board stressed the point that the step is a temporary expedient and should not be taken as a "basis for future plans of permanent operating rights and does not represent any indication of permanent policy with respect to international commercial aviation."

The permits were granted TACA, S. A. British West Indian Airways, Royla, Dutch Airlines (KLM), Expreso Aero Inter-American, S. A. and Compania Nacional Cubana de Aviacion, S. A.

## Posters Available

Two war posters, in color, have recently been printed by the CAA for use of its training schools but a limited number of copies is available for municipal and school libraries. One of the posters carries a fire-prevention message and the other points out the contributions of the CAA to the war effort. Libraries desiring copies should write to the Director, Information and Statistics, CAA, Washington, D. C.

the aircraft. This accident occurred on the first flight following partial overhaul and installation of the engine by uncertificated personnel; however, subsequent examination of the power plant failed to reveal any cause for its malfunctioning. There was adequate fuel on board and the valve was found in the "on" position.

The terrain surrounding the airport was such that the pilot could not have expected to make a safe landing straight ahead. However, the consequences might not have been so disastrous had he continued straight ahead instead of attempting to turn back to the field.

**Probable cause.**—Engine failure on take-off for reasons not determined.

## TWA, United Routes Extended To Washington

United Air Lines, Transcontinental & Western Air, and Eastern Air Lines have been granted new post-war routes for one-carrier air service between Washington, D. C., and important cities to the west.

### Ohio Cities Benefit

United's new route from Toledo, Ohio, to Washington provides additional one-carrier service between Washington and Chicago and points west as far as San Francisco, Portland and Seattle. TWA's new route between Dayton, Ohio, and Washington via Columbus, Ohio, and Wheeling, W. Va., enables TWA to provide one-carrier service between Washington and St. Louis and points west as far as San Francisco and Los Angeles. Many of the proposed schedules of TWA and United provide for through one-plane service.

Eastern's present route No. 47 is extended from Louisville to Washington via Frankfort-Lexington, Ky., and Charleston, W. Va., and will enable that carrier to operate a through one-plane service between St. Louis and Washington through Indiana, Kentucky, and West Virginia.

### Carriers Intervene

Penn-Central Airlines, with service from Cleveland and Pittsburgh to Washington, and American Airlines with service from Washington to Chicago and Louisville, contended that the routes would create serious competition and result in considerable financial loss to them. While the Board does not believe those fears justified, they stated "any loss of traffic suffered by Penn-Central Airlines should be substantially offset by the development of an increased volume of local traffic, particularly on its densely populated and excellent traffic-producing route No. 14 . . . we think that any adverse effects will be temporary only and will be offset by the general increase in air travel and other factors . . . we believe that the benefits which will accrue to the public in improved air service of a national character are of controlling importance."

The Board pointed out that Washington is one of the fastest growing large cities in the Nation and since 1939 has produced more air passenger traffic than any other city in the country except New York and Chicago. As the nation's Capital, Washington is unique among all cities in the country in that it has daily dealings with every city and town in the Nation, affecting every citizen. Washington's community of interest pervades the entire United States. The future of air transportation to and from Washington lies in a recognition of the fact that the city does occupy this unique position.



# 18 Airlines Give Views On International Policy

Commercial air transportation has become international in scope and the Civil Aeronautics Board is giving its attention to the future international policy of this country. As groundwork in the study the Board has asked aviation groups to express their views through a questionnaire on international air problems.

In a joint reply to the issues raised, 18 airlines are of the mind that the Government's first step is to work out a reciprocal exchange with other countries of the general right of "innocent" flight and the right to land for refueling and other technical purposes, as distinguished from the right to engage in air commerce.

## Equal Trade Basis

In the matter of air commerce the responding airlines believe that the United States should seek all operating and commercial rights necessary to trade on equal basis with other countries, including the right of American flag carriers to maintain communication services, meteorological services, and keep American personnel stationed in the territory of other States. To do this will make some degree of international cooperation inevitable.

They also believe that the United States Government must conduct many negotiations with foreign governments for the purpose of securing international air transport operating rights, and that private companies should conclude such basic negotiations only with the consent of the Government.

## Want Private Ownership

As to the question of Government ownership or management of American flag carriers and the creation of transport operations through internationally owned and controlled Government corporations, the airlines' answer is an emphatic "no!"

They believe that private companies should be permitted to operate in both the domestic and foreign fields and that the extent and conditions for operation must be decided in terms of individual air carriers according to the policies and standards already established by the Civil Aeronautics Act.

One of the questions raised concerns the forming of an international organization very much like the home one to set safety standards with respect to flight rules and traffic control; the certification of aircraft and airmen; control of economic matters such as passengers and cargo rates, or methods of competition; and to establish and operate international airways and airports.

## Uniform Rules

The airlines responded that some uniform "rules of the road" for airways must be established from time to time through international agreement. But they believe that the solutions should be left to work themselves out when the need develops. And that while Government supervision is needed, the air carriers should be permitted to deal with the problems by private understandings reached among themselves.

Many of the problems posed by the Board, the airlines indicated in their answers, will require further thought and air transport developments before they can be solved.

## In National Interest

In announcing their decisions, the airlines indicated that they have tried to arrive at a policy which will be in the best interests of the United States in the development of its foreign air transportation. And while many of the airlines naturally desire to operate abroad, or to extend their foreign commercial operations, they recognize that the final decision as to which airlines fly abroad, and the routes to be flown, rests with the proper authorities of the Federal Government and should be decided in the national interest rather than from the point of view of their self-interest.

The airlines joining in the reply are: All American, American Airlines, American Export, Braniff Airways, Chicago and Southern Air Lines, Colonial Airlines, Continental Air Lines, Delta Air Lines, Mid-Continent Airlines, National Airlines, Northeast Airlines, Northwest Airlines, Pennsylvania-Central Airlines, Transcontinental & Western Air, United Air Lines, and Western Air Lines.

## First Woman Applicant Asks to Carry Airmail

The Board now has on file its first request for a certificate of public convenience and necessity from a woman applicant. Angeline Harris, aviatrix in the Civil Air Patrol, has applied for a permit to establish mail and passenger service from Rutherfordton, N. C., to around 60 towns in North Carolina, South Carolina, Tennessee, and Virginia.

In her application, Miss Harris proposed to use autogiros, helicopters, and conventional planes when necessary, in bringing scheduled service to first- and second-class post offices along the proposed routes.

She indicated that she plans to use the top of the post office buildings, or adjacent space for landing areas.

# Braniff Granted Amarillo-Denver Post War Route

The Civil Aeronautics Board has announced its decision in the so-called Texas case involving the applications of four airlines for additional routes in Texas, New Mexico, and Colorado.

The Board extended the route operated by Braniff Airways from Amarillo to Denver, via Pueblo and Colorado Springs. This will permit one-company service from Denver to the Texas cities of Dallas-Fort Worth, Wichita Falls, Waco, Austin, San Antonio, Corpus Christi, Brownsville, Houston, and Galveston, and Oklahoma City. However, the extension, which is effective when national defense no longer requires a delay in the inauguration of the service, is subject to the condition that Pueblo and Colorado Springs, which are on a route of Continental Air Lines, be served only by flights originating and terminating at Fort Worth-Dallas or points south.

Although the Board denied Braniff's application for a permanent certificate between San Antonio and El Paso via Uvalde, Del Rio, and Marfa, it indicated that such a service would be authorized on a temporary basis to determine the traffic needs if such an application were filed by Braniff.

In the same decision, the Board denied the applications of Continental Air Lines, Inc., for service between Hobbs and San Antonio via Midland, Big Spring and San Angelo, Tex., and between Pueblo, Colo., and Amarillo, Tex.

The application of Transcontinental & Western Air, Inc., to establish a route from Houston and Fort Worth-Dallas to Amarillo was denied.

## Feeder Service Pending

Essair, Inc., made application for authority to engage in the transportation of persons, property, and mail between Houston and Garden City, or Albuquerque via Austin, San Angelo, Big Spring, Lubbock, and Amarillo or Abilene or both. Essair proposed a "feeder service route" which would provide service to small intermediate communities, connecting with main lines at Austin, Houston, Big Spring, and Amarillo, providing Texas cities on the route with connecting service to other parts of the country, as well as local service between cities on the route. The Board deferred action on this application pending the results of its investigation into "local feeder-pickup air service" as a means of extending air transportation to communities and localities which do not have trunk line service.

An investigation by the Board with respect to the need for air service to Brownwood, Tex., was deferred pending action upon the Essair proposal.



# Domestic Air Carrier Operation Statistics for the Month of March 1943

Operator	Routes operated	Revenue miles flown	Revenue passengers carried	Revenue passenger miles flown	Express carried (pounds)	Express pound-miles flown	Passenger seat-miles flown	Revenue passenger load factor (percent)
All American Aviation, Inc.	Pittsburgh-Huntington, Philadelphia, Williamsport, Jamestown, etc.	86,489	0	0	9,109	1,042,327	0	-----
American Airlines, Inc.	Dallas-Los Angeles	621,961	12,964	10,574,789	182,568	175,328,880	11,999,222	88.13
	New York-Chicago	303,760	16,396	5,906,903	614,088	267,738,780	7,321,398	80.68
	Boston-New York	90,751	9,203	1,550,069	192,946	29,671,481	1,837,925	84.34
	Boston-Cleveland	17,953	1,529	226,404	25,496	4,051,166	350,684	64.56
	Cleveland-Nashville	59,795	4,516	961,184	79,540	22,393,702	1,230,359	78.12
	New York-Fort Worth	529,279	14,857	8,829,332	251,194	129,656,147	10,033,466	88.00
	Washington-Chicago	159,422	5,548	2,406,042	100,410	38,493,843	3,034,184	79.30
	Chicago-Fort Worth	110,099	3,832	1,830,435	76,922	45,368,824	2,143,676	85.39
	Buffalo-Toronto	3,952	378	28,728	2,576	195,776	80,332	35.76
	El Paso or Fort Worth-Mexico City	134,221	1,673	1,610,558	7,072	6,977,133	2,399,664	67.12
	Total	2,121,193	70,896	33,924,444	1,532,812	719,875,732	40,430,910	83.91
Braniff Airways, Inc.	Chicago-Dallas	199,539	5,126	3,067,231	80,869	49,235,901	3,389,659	90.49
	Dallas-Brownsville	133,820	7,847	2,104,377	31,024	7,308,910	2,348,009	89.62
	Total	333,359	12,973	5,171,608	111,893	56,544,811	5,737,668	90.13
Chicago & Southern Air Lines, Inc.	Chicago-New Orleans	145,675	5,703	2,302,978	54,861	25,174,855	2,762,592	83.61
	Memphis-Houston	29,009	1,175	365,928	8,018	3,194,452	517,960	70.65
	Total	174,684	6,878	2,668,906	62,879	28,369,307	3,280,552	81.36
Continental Air Lines, Inc.	Denver-El Paso	83,766	2,699	854,367	6,839	2,517,742	965,122	88.53
	Pueblo-Tulsa	34,947	1,189	281,043	2,078	406,199	368,985	76.80
	Total	118,713	3,888	1,135,410	8,917	2,923,941	1,334,107	85.11
Delta Air Corp.	Charleston & Savannah-Fort Worth	122,892	5,875	2,231,780	29,297	11,957,330	2,558,808	87.22
	Atlanta-Cincinnati	42,191	2,388	777,797	17,184	5,300,682	887,712	87.62
	Total	165,083	8,263	3,009,577	46,481	17,258,012	3,446,520	87.32
Eastern Air Lines, Inc.	New York-Brownsville & San Antonio	400,768	12,047	6,717,127	123,158	64,790,582	8,032,349	83.63
	New York-Miami	301,861	12,777	7,353,977	157,910	125,090,998	8,565,044	85.63
	Chicago-Jacksonville	164,207	6,491	2,777,915	73,502	33,578,265	3,217,831	86.33
	Atlanta-Tampa	20,592	991	360,518	8,942	3,435,175	429,832	83.87
	Total	1,087,428	32,306	17,189,537	365,512	227,495,020	20,245,056	84.91
Inland Air Lines, Inc.	Denver-Great Falls	44,789	913	303,747	2,611	728,176	518,650	58.56
	Cheyenne-Huron	24,618	0	0	86	20,249	0	-----
	Total	69,407	913	303,747	2,697	748,425	518,650	58.56
Mid-Continent Airlines, Inc.	Minneapolis-Tulsa	62,970	1,898	519,058	8,172	1,734,486	804,424	64.53
	Minneapolis-Kansas City	24,590	0	0	858	344,373	0	-----
	Total	87,560	1,898	519,058	9,030	2,078,859	804,424	64.53
National Airlines, Inc.	Jacksonville-Miami	49,723	2,476	591,677	9,298	1,897,472	696,122	85.00
	Jacksonville-New Orleans	93,232	3,122	1,129,154	10,308	3,187,970	1,305,248	86.51
	Total	142,955	5,598	1,720,831	19,606	5,085,442	2,001,370	85.96
Northeast Airlines, Inc.	Boston-Presque Isle & Moncton	49,146	1,797	456,664	6,870	1,453,124	1,032,074	44.25
Northwest Airlines, Inc.	Chicago-Seattle	297,045	7,384	3,635,099	134,903	93,680,771	4,761,755	76.34
	Minneapolis-Duluth	6,272	0	0	551	78,793	0	-----
	Total	303,317	7,384	3,635,099	135,454	93,759,564	4,761,755	76.34
Pennsylvania-Central Airlines Corp.	Norfolk-Detroit	162,636	13,667	2,842,599	273,875	56,180,426	3,333,348	85.28
	Detroit-Milwaukee	14,226	1,226	234,199	9,894	1,622,854	298,746	78.39
	Pittsburgh-Buffalo	12,248	817	160,244	14,587	2,150,630	257,208	62.30
	Pittsburgh-Birmingham	38,818	1,380	459,500	3,791	1,186,996	808,621	56.83
	Total	227,928	17,090	3,696,542	302,147	61,140,906	4,697,923	78.68
Transcontinental & Western Air, Inc.	New York-Los Angeles	907,312	20,200	12,789,811	527,046	341,330,580	14,740,302	86.77
	Dayton-Chicago	14,205	1,045	237,077	32,805	7,143,694	278,934	84.99
	Boulder City-San Francisco	25,918	634	245,257	474	232,851	466,426	52.58
	Kansas City-Chicago & Pittsburgh	270,616	6,782	3,617,862	204,387	105,727,382	3,942,315	91.77
	St. Louis-Detroit via Cincinnati and Dayton	49,005	3,310	756,477	43,925	10,761,183	879,445	86.02
	Total	1,267,056	31,971	17,646,484	808,637	465,195,690	20,307,422	86.90
United Air Lines Transport Corp.	New York-San Francisco	1,243,948	21,270	18,046,957	636,402	540,872,600	19,899,948	90.69
	Salt Lake-Seattle	99,587	4,856	1,889,563	28,819	19,205,287	2,096,555	90.13
	Los Angeles-Seattle	377,919	17,610	7,213,173	126,471	57,669,070	7,655,933	94.22
	Seattle-Vancouver	7,651	757	106,784	5,237	646,967	154,891	68.94
	Total	1,729,105	44,493	27,256,477	796,929	618,393,924	29,807,327	91.44
Western Air Lines, Inc.	San Diego-Salt Lake City	129,232	5,326	2,084,320	98,567	42,886,256	2,427,458	85.86
	Salt Lake City-Great Falls	28,486	592	215,926	2,285	901,295	376,699	57.32
	Great Falls-Lethbridge	5,794	198	25,682	2,282	246,298	83,896	30.61
	Total	163,512	6,116	2,325,928	103,134	44,033,849	2,888,053	80.54
	Grand total	8,126,935	252,464	120,660,312	4,320,107	2,345,398,933	141,293,811	85.40

Passengers carried (total revenue and non-revenue) 265,175. Passenger miles flown (total revenue and non-revenue) 124,256,467.

# Domestic Air Carrier Operation Statistics for the First 3 Months of 1943 Compared with the same Period of 1942

Operator	Revenue miles flown		Revenue passengers carried		Revenue passenger miles flown		Express carried (pounds)	
	January-March		January-March		January-March		January-March	
	1943	1942	1943	1942	1943	1942	1943	1942
All American Aviation, Inc.	235,990	190,851	0	0	0	0	18,454	11,869
American Airlines, Inc.	6,120,963	7,783,836	191,679	275,485	93,950,370	97,874,503	4,089,610	1,991,911
Braniff Airways, Inc.	929,210	1,464,408	37,025	41,397	13,855,998	12,605,723	311,814	199,303
Catalina Air Transport	0	20,444	0	4,723	0	141,690	0	35,199
Chicago & Southern Air Lines, Inc.	511,313	600,002	19,004	16,003	7,441,767	5,816,454	178,071	97,649
Continental Air Lines, Inc.	365,704	491,698	11,678	8,064	3,325,215	2,019,981	26,967	14,098
Delta Air Corporation	489,316	741,013	23,566	25,789	8,859,600	7,238,267	122,158	55,052
Eastern Air Lines, Inc.	3,128,875	5,426,169	90,616	153,125	48,704,481	65,211,823	1,005,728	810,236
Inland Air Lines, Inc.	197,328	351,074	2,577	2,820	874,470	705,235	8,542	3,465
Mid-Continent Airlines, Inc.	295,103	566,385	5,132	8,621	1,436,260	2,178,135	26,638	19,777
National Airlines, Inc.	410,280	402,100	15,944	12,407	4,852,313	3,342,067	33,008	40,031
Northeast Airlines, Inc.	118,954	285,053	4,209	8,369	1,032,117	1,435,216	13,741	13,449
Northwest Airlines, Inc.	862,261	1,405,096	18,593	27,171	9,237,745	11,028,669	361,097	189,619
Pennsylvania-Central Airlines Corp.	625,365	1,502,385	43,173	77,942	9,359,766	15,611,823	705,419	532,316
Transcontinental & Western Air, Inc.	3,645,319	4,491,766	85,206	89,637	46,884,457	40,206,638	2,178,696	1,182,333
United Air Lines Transport Corp.	4,902,978	6,037,649	111,187	118,643	69,951,605	57,919,532	2,196,203	1,836,683
Western Air Express, Inc.	411,692	717,788	15,060	17,769	5,056,122	5,033,416	242,359	227,970
Total	23,220,660	32,457,917	674,649	887,965	325,444,286	328,369,202	11,538,525	7,260,960
Index (1942=100)	71.54	100.00	75.98	100.00	99.11	100.00	158.91	100.00

Operator	Express pound miles flown		Passenger seat-miles flown		Revenue passenger load factor (percent)	
	January-March		January-March		January-March	
	1943	1942	1943	1942	1943	1942
All American Aviation, Inc.	2,255,465	1,017,848	0	0		
American Airlines, Inc.	2,023,326,467	1,009,077,580	116,028,865	148,152,078	80.97	66.06
Braniff Airways, Inc.	148,964,877	83,875,194	15,776,003	24,489,836	87.83	51.47
Catalina Air Transport	0	1,055,970	0	224,400		63.14
Chicago & Southern Air Lines, Inc.	79,704,107	40,456,427	9,889,806	12,501,983	75.25	46.52
Continental Air Lines, Inc.	8,060,693	3,997,754	4,055,167	4,965,674	82.00	40.68
Delta Air Corporation	45,555,799	18,361,145	10,284,144	12,358,754	86.15	38.57
Eastern Air Lines, Inc.	642,223,159	492,466,375	58,233,072	106,120,462	83.64	61.45
Inland Air Lines, Inc.	1,987,560	972,896	1,505,073	3,334,920	58.10	21.15
Mid-Continent Airlines, Inc.	5,944,598	4,584,424	2,310,750	6,283,792	63.11	34.66
National Airlines, Inc.	15,210,330	9,368,731	5,744,050	5,282,202	84.48	63.27
Northeast Airlines, Inc.	2,870,492	2,472,511	2,498,654	5,664,659	41.31	25.34
Northwest Airlines, Inc.	248,682,835	140,657,078	12,906,248	22,830,425	71.58	48.31
Pennsylvania-Central Airlines Corp.	137,136,559	112,485,862	12,916,430	30,091,413	72.46	51.88
Transcontinental & Western Air, Inc.	1,318,729,317	770,526,739	57,159,252	76,687,122	82.02	52.43
United Air Lines Transport Corp.	1,695,268,464	1,460,661,574	81,100,106	84,685,032	86.25	68.39
Western Air Express, Inc.	88,217,783	105,896,260	7,238,590	11,230,029	78.12	44.82
Total	6,464,138,505	4,257,934,368	397,646,219	554,902,781	81.84	59.18
Index (1942=100)	151.81	100.00	71.66	100.00	138.29	100.00

	January	February	March	Total		January	February	March	Total
Passengers carried (total revenue and non-revenue)	208,380	233,049	265,175	706,604	Passenger miles flown (total revenue and non-revenue)	101,410,602	110,982,551	124,256,467	336,649,620

## Aeronautical Legislation

### Introduced

- S. 1106—CREDIT: Bill to prohibit the allowance of credit in the computation of lump-sum payments to Air Corps Reserve officers for active service hereafter performed during present wars and for 6 months thereafter. Referred to the Committee on Military Affairs.
- S. 1113—NAVAL CADET ACT: Bill to amend Section 11 of the Naval Aviation Cadet Act of 1942. Referred to the Committee on Naval Affairs.

### Passed

- H. J. Res. 108—ANNIVERSARY: Bill commemorating May 15, 1943, as the anniversary of the inauguration of Air Mail Service.
- H. R. 2581—NAVAL AIRCRAFT: Bill authorizing the acquisition and conversion or construction of certain landing craft and district craft for the United States Navy.
- H. R. 1670—CPT AMENDMENT: Bill to amend section 2 of the Civilian Pilot Training Act of 1939.

## CAP Training

The Civil Air Patrol gives its members thorough ground training and encourages all those to take flight training who can meet war time requirements. Certificates of essentiality to rent aircraft for flight training are issued to qualified CAP members to prepare them for missions of the Patrol.



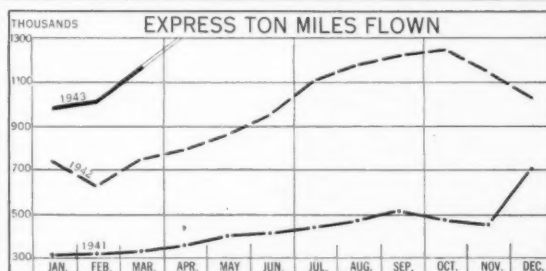
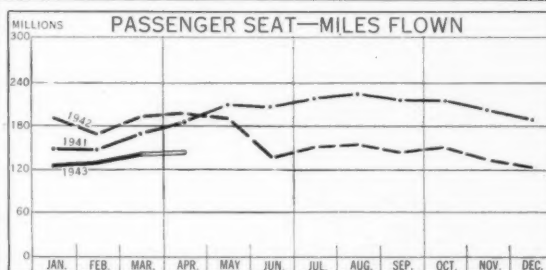
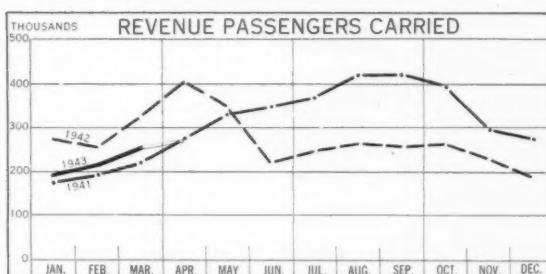
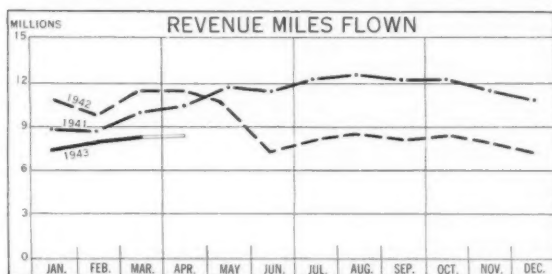
## Pilot Study Book on Sale

CAA's Bulletin 32, "Fundamentals of Elementary Flight Maneuvers," is on sale at the Superintendent of Documents, Government Printing Office, Washington, D. C., at 20 cents a copy. Used as a study book by student pilots, it contains 66 pages and illustrations. Classification number for ordering is C31.103:32.

## Correction Part 04

Holders of Part 04 "Airplane Airworthiness," as amended to August 15, 1942, are advised to strike the obsolete sections 04.7060 and 04.7061, which were included in that edition through an error in editing. Those holding the February, 1943 reprint edition with amendments to September 30, 1942 have correct copies.

## Comparative Charts of Domestic Operations for 1941, 1942, and the First 4 Months of 1943



### Additional Stops Awarded Airlines

The Civil Aeronautics Board recently announced its decision in the New Orleans-Dallas-Fort Worth cases involving the applications of five airlines for additional service between New Orleans, La., and Dallas-Fort Worth, Tex., via various intermediate points.

The Board decided to amend the certificate of Delta Air Corporation by extending its route from Shreveport to New Orleans, La., via Alexandria and Baton Rouge and New Orleans to Fort Worth-Dallas, to provide service between these points. Delta now operates between Fort Worth, Tex., and Charleston, S. C. The extension of the route will not be effective until the national defense no longer requires a delay in the inauguration of the new service.

Eastern Air Line, Inc., was granted permission to serve Lake Charles, La., as an intermediate point between Baton Rouge, La., and Beaumont, Tex., on their route originating at New York.

### New Type Approvals

(Approval numbers and dates of assignment in parentheses)

#### Propellers

Munk, P-11, wood, 6 feet, 0 inch diameter, 3 feet, 6-inch pitch, 87 horsepower, 2,400 revolutions per minute (type certificate No. 794, May 27, 1943).

### New Models Added to Old Type Approvals

(Approval numbers and dates of approval of new models in parentheses)

#### Engines

Pratt and Whitney, twin wasp SSC7G; 14 radial air-cooled, two-stage supercharging; Maximum ratings: except take-off main stage only, 1,100 horsepower, 2,550 revolutions per minute, 2,500 feet. Low ratio auxiliary, 1,050 horsepower, 2,550 revolutions per minute, 12,000 feet. High ratio auxiliary, 1,000 horsepower, 2,550 revolutions per minute, 19,500 feet. Take-off 1,200 horsepower, 2,700 revolutions per minute, sea level (type certificate No. 186, March 16, 1943).

#### Appliances

Russell safety belt, Models AE-601 and AE-700. Approved for one or two persons (type certificate No. 90, May 5, 1943).

### Report Issued On Seaboard Service

Of five airlines applying for permission to serve Atlantic Seaboard cities, two, Eastern and National, were recommended in a recent report of Civil Aeronautics Board examiners.

Five applications involving service to several coastal cities and Nassau, Bahamas, had been filed during 1940 and 1941 by Colonial Airlines, Inc. (formerly Canadian-Colonial), Eastern Air Lines, Inc., National Airlines, Inc., Seaboard Airways, Inc., and Pennsylvania-Central Airlines Corporation. All applications were consolidated into one proceeding on September 16, 1941.

The Board examiners recommended that Eastern be allowed to serve Raleigh, N. C., as an alternate intermediate point to Greensboro, N. C.; Columbia, S. C., as an alternate intermediate to Charleston, S. C.; and Miami, Fla., as an additional stop. The examiners recommended that National be issued a certificate to carry passengers, property, and mail between Jacksonville, Fla., and New York, N. Y., via Charleston, S. C., Wilmington, N. C., Norfolk, Va., and Philadelphia.



# OFFICIAL ACTIONS . . . Civil Aeronautics Board

## Orders

ORDER No. 2247..... April 29, 1943

Partially rescinded Orders Nos. 1762 and 1815 insofar as they authorized temporary suspension of service to and from San Diego, Calif., by United Air Lines Transport Corporation.

ORDER No. 2248..... April 30, 1943

Suspended for 90 days private pilot certificate held by Tom H. Miller for certain violations of the Civil Air Regulations.

ORDER No. 2249..... May 3, 1943

Temporarily suspended student pilot certificate held by Lawrence F. Neil for certain violations of the Civil Air Regulations.

ORDER No. 2250..... May 1, 1943

Amended Order Serial No. 2205, so as to extend the effective date of suspension of service at certain points by Mid-Continent Airlines, Inc., to July 27, 1943.

ORDER No. 2251..... May 1, 1943

Denied motion of Northwest Airlines, Inc., for consolidation and for temporary certificate of public convenience and necessity for the transportation of persons, property, and mail between certain points.

ORDER No. 2252..... April 7, 1943

Authorized issuance, with certain limitations, of temporary foreign air carrier permits to certain airlines re air transportation in the Caribbean Area; denied applications in whole or in part filed by various airlines for authority to engage in such air transportation. (Opinion and Order.)

ORDER No. 2253..... May 4, 1943

Granted permission to United Air Lines Transport Corporation for expeditious use of Eugene Airport so as to serve Eugene, Oreg. (Effective May 1, 1943.)

ORDER No. 2254..... May 4, 1943

Permitted inauguration of non-stop service by United Air Lines Transport Corporation between Des Moines, Iowa, and North Platte, Nebr., on Route No. 1. (Effective May 1, 1943.)

ORDER No. 2255..... May 5, 1943

Ordered that if Howard Grastorf, CAA or before June 15, 1943, is issued a commercial pilot certificate and flight instructor rating, they shall be limited for 6 months to piloting aircraft only while receiving or giving instruction in the War Training Service, while making check flights when accompanied by instructors or inspectors of the CAA, or while on military duty; if he fails to qualify for a commercial pilot certificate and flight instructor rating on or before June 15, 1943, his private pilot certificate will be suspended for 6 months, for violation of the Civil Air Regulations. (Opinion and Order.)

ORDER No. 2256..... May 5, 1943

Revoked student pilot certificate held by Harry E. Hinshaw, Jr., for certain violations of the Civil Air Regulations.

ORDER No. 2257..... May 5, 1943

Granted temporary exemption to Alaska Star Airlines, Inc., and Cordova Air Service, Inc., from provisions of Title IV of the Civil Aeronautics Act of 1938.

ORDER No. 2258..... May 5, 1943

Granted temporary exemption to Alaska Star Airlines, Inc., from the provisions of Sec. 401 (a) of the Civil Aeronautics Act of 1938.

ORDER No. 2259..... May 6, 1943

Released for publication Orders dated April 13, 1942, and July 1, 1942, re application of Pan American Airways, Inc., for an exemption from the provisions of Sec. 401 (a) of the Civil Aeronautics Act of 1938; and re non-stop notice of Pan American Airways, Inc. (Such orders to be numbered 2260 and 2261, respectively.)

ORDER No. 2260..... April 13, 1942

Temporarily exempted Pan American Airways, Inc., from the provisions of Sec. 401 (a) of the Civil Aeronautics Act of 1938 insofar as said provisions would otherwise prevent them from temporarily engaging in air transportation to and from Beane Field, St. Lucia, British West Indies, as an intermediate point between San Juan, Puerto Rico, and Port of Spain, Trinidad, subject to certain conditions.

ORDER No. 2261..... July 1, 1942

Permitted inauguration of non-stop service by Pan American Airways, Inc., between San Juan, Puerto Rico, and St. Lucia, British West Indies. (Effective July 1, 1942.)

ORDER No. 2262..... May 6, 1943

Approved Agreement (Contract CAB No. 80) by and between Pan American Airways, Inc., and Railway Express Agency, Inc., relating to an agency agreement between the parties under which the Express Agency shall issue Airway bills.

ORDER No. 2263..... May 8, 1943

Rescinded Order, Serial No. 2010, insofar as it requires American Airlines, Inc., to file special monthly reports of the traffic carried to and from San Diego, Calif.

ORDER No. 2264..... May 10, 1943

Denied request of John W. Priddy for a waiver of Civil Air Regulation 21.10.

ORDER No. 2265..... May 10, 1943

Amended certificate and denied other applications of certain airlines for certificates of public convenience and necessity; dismissed proceedings of the Board re Fort Stockton, Alpine, and Brownwood, Tex.

ORDER No. 2266..... May 11, 1943

Released for public disclosure certain dockets re applications for approval of interlocking relationships under Sec. 409 (a) of the Civil Aeronautics Act of 1938.

ORDER No. 2267..... May 11, 1943

Granted request of Douglas Campbell, Vice President of Pan American-Grace Airways, Inc., for permission to ride, during a certain period, with assistant airline transport pilots employed by them.

ORDER No. 2268..... May 10, 1943

Amended certificates of public convenience and necessity re applications of Transcontinental & Western Air, Inc., Western Air Lines, Inc., and United Air Lines Transport Corporation; deferred decision on the application of Western Air Lines, Inc., until the Board renders its decision in Docket 226; denied applications of Transcontinental & Western Air, Inc. and Western Air Lines, Inc., in certain other respects. (Opinion and Order.)

ORDER No. 2269..... May 14, 1943

Revoked student pilot certificate held by Dominick J. Campanaro for certain violations of the Civil Air Regulations.

ORDER No. 2270..... May 14, 1943

Revoked commercial pilot certificate held by Clifton S. Stovall for claiming the sum of \$2,960 for the completion of the training of 20 trainees in the Stage D Elementary Course Civilian Pilot Training Program, when such training had not been given, in violation of the Civil Air Regulations.

ORDER No. 2271..... May 10, 1943

Directed Pan American-Grace Airways, Inc., to show cause why the Board should not make final their findings and conclusions re compensation for the transportation of mail, and, upon the basis thereof, fix, determine, and publish the rate to be paid them for the transportation of mail.

ORDER No. 2272..... May 15, 1943

Denied motion for immediate hearing of the application of Mid-Continent Airlines, Inc., for amendment of their certificate of public convenience and necessity.

ORDER No. 2273..... May 10, 1943

Amended certificates of public convenience and necessity of Eastern Air Lines, Inc. and Delta Air Corporation; denied application of Eastern Air Lines, Inc. in all other respects; denied applications of National Airlines, Inc., Braniff Airways, Inc., and Chicago and Southern Air Lines, Inc. (Opinion and Order.)

ORDER No. 2274..... May 26, 1943

Denied motions filed by Braniff Airways, Inc. that the Board proceed either in the matter of mail compensation, Docket No. 838, or the matter of passenger fares, Docket No. 850.

ORDER No. 2275----- May 21, 1943

Temporarily suspended student pilot certificate held by Lloyd Martin for certain violations of the Civil Air Regulations.

ORDER No. 2276----- May 21, 1943

Temporarily suspended student pilot certificate held by Andrew G. Gould for a violation of the Civil Air Regulations.

ORDER No. 2277----- May 26, 1943

Granted American Airlines, Inc., permission to intervene in the matter of the application of United Air Lines Transport Corporation for approval of the acquisition of control by United Air Lines Transport Corporation of Lineas Aereas Mineras, S. A., a Mexican corporation.

ORDER No. 2278----- May 26, 1943

Amended Order, Serial No. 2096 re temporary suspension of service by Eastern Air Lines, Inc., at Baton Rouge, La.

ORDER No. 2279----- May 28, 1943

Prescribed Amendment No. 1 to the form of monthly report of war contract operations for domestic air carriers.

ORDER No. 2280----- May 26, 1943

Waived Section 21.10 of the Civil Air Regulations so as to permit R. E. Bitner to apply for an airline transport pilot certificate.

ORDER No. 2281----- May 28, 1943

Conditionally approved waiver of Section 20.149 of the Civil Air Regulations in the matter of the application of Norman S. Cornish for a commercial pilot certificate.

ORDER No. 2282----- May 28, 1943

Waived Section 20.149 of the Civil Air Regulations re application of Joe Thomas May for a commercial pilot certificate.

ORDER No. 2283----- May 28, 1943

Temporarily suspended private pilot certificate held by Herbert Starks for certain violations of the Civil Air Regulations.

ORDER No. 2284----- May 28, 1943

Temporarily suspended student pilot certificate held by James D. Tilford, Jr., for violation of the Civil Air Regulations.

ORDER No. 2285----- May 28, 1943

Temporarily suspended private pilot certificate held by John Aquila Hart for certain violations of the Civil Air Regulations.

ORDER No. 2286----- May 28, 1943

Revoked mechanic certificate with parachute rigger rating and ground instructor certificate held by Samuel Bert White for violation of the Civil Air Regulations.

ORDER No. 2287----- May 31, 1943

Revoked student pilot certificate held by Kenneth Dale Hess for certain violations of the Civil Air Regulations.

ORDER No. 2288----- May 31, 1943

Temporarily suspended student pilot certificate held by Comer Benson Bene-

field for certain violations of the Civil Air Regulations.

ORDER No. 2289----- May 31, 1943

Temporarily exempted Arthur G. Woodley, doing business as Woodley Airways, from the provisions of Section 401 (a) of the Civil Aeronautics Act of 1938, insofar as said provisions would otherwise prevent them from temporarily engaging in air transportation of persons and property between Anchorage and Juneau, via certain intermediate points.

ORDER No. 2290----- May 31, 1943

Granted permission to Braniff Airways, Inc., for expeditious use of Blackland Airfield so as to serve Waco, Texas. (Effective June 1, 1943.)

## Regulations

REGULATION No. 274----- May 7, 1943

Effective May 7, 1943:

A certificated air-traffic control-tower operator of the Administrator on duty in a radio equipped airport control tower may authorize day flights of aircraft, being tested for military use when weather conditions within a control zone are below the minimums prescribed in § 60.440 of the Civil Air Regulations if air traffic conditions permit and the pilot so requests. During any such flight the pilot need not comply with § 60.3503 and § 60.442 of the Civil Air Regulations. Such flights shall be permitted only after due notice, and at airports designated by the Administrator upon information from the military force that such testing is required in the conduct of the war.

This regulation shall terminate at the end of the war.

REGULATION No. 275----- May 26, 1943

Effective June 1, 1943:

SECTION 292.3 OF THE ECONOMIC REGULATIONS—EXEMPTION FROM PROVISIONS OF SECTION 401 (A) OF THE ACT AS TO FLIGHTS REGULARLY SCHEDULED BETWEEN POINTS ON TWO OR MORE ROUTES.

Notwithstanding the provisions of section 401 (a) of the Act, an air carrier on any flight which is regularly scheduled to be operated between points on two or more of its certificated routes, via a junction point of such routes, may omit a stop at such junction point whenever weather conditions at such junction point otherwise would require the cancellation or postponement of any portion of such flight.

AMENDMENT 61-7----- May 7, 1943

Effective May 7, 1943:

Part 61 of the Civil Air Regulations is amended as follows:

1. Amend section 61.731 to read as follows:  
61.731 Deviation from airway. No scheduled air carrier aircraft shall deviate from its prescribed airway or, if there be no airway, from an area between two lines parallel to and 5 miles on either side of the center of the authorized route, except when operating in accordance with instructions issued by a certificated air-traffic control-tower operator or when circumstances render such deviation necessary as a safety measure. Any deviation of more than 25 miles on either side of the center line of the prescribed airway or authorized route shall be explained by the pilot in a written report to the Administrator of Civil Aeronautics. Such report shall be made within 7 days after the completion of the flight.

2. Amend section 61.740 to read as follows:  
61.740 Visual contact flights.

3. Add new sections 61.7400 and 61.7401 to read as follows:

61.7400 Day. Except during take-offs and landings, no scheduled air carrier aircraft shall be flown at an altitude less than 500 feet above the ground, or within 500 feet of any mountain, hill, or other obstruction to flight except as may be specifically approved by the Administrator.

61.7401 Night. No scheduled air carrier aircraft shall be flown at an altitude of less than 1,000 feet above the highest obstacle located within a horizontal distance of 5 miles from the center of the course intended to be flown, except during take-offs and landings or when operating in accordance with specific procedures for definite localities approved by the Administrator.

AMENDMENT 61-8----- May 10, 1943

Effective June 1, 1943:

Part 61 of the Civil Air Regulations is amended as follows:

1. Amend section 61.20 to read as follows:  
61.20 Route operation. No air carrier shall operate aircraft in scheduled air transportation over any route or part thereof until rated competent to operate thereover in its air carrier operating certificate except as provided by § 61.200.

2. Add a new section 61.200 to read as follows:

61.200 Off-route operation. An air carrier may operate aircraft in scheduled air transportation from any alternate airport where such procedure is not specifically forbidden by the Administrator via a route not included in its air carrier operating certificate to a scheduled stop on its regular route, and in making such flight need not comply with those requirements of the Civil Air Regulations pertaining to (1) pilot route competency, (2) adherence to lighted airways, and (3) the provisions relating to radio range courses if the flight can be conducted under contact flight rules. No such flight shall be made, except along a civil airway, unless the aircraft is equipped with a fully functioning automatic radio direction finder. When a flight is made over an unauthorized route the air carrier shall make a written report to the Administrator within seven days after the completion of such flight setting forth full details with respect to such flight.

AMENDMENT 61-9----- May 10, 1943

Effective June 1, 1943:

Section 61.7110 of the Civil Air Regulations is amended to read as follows:

61.7110 Clearance of flights.

(a) On alternate routes. Clearance of flights on alternate routes shall not be permitted unless such route or routes have been approved and listed in the air carrier operating certificate and conditions on the regular route are such that the flight would otherwise be canceled or delayed, or when for the purpose of keeping pilots qualified over such routes. When flights are cleared over alternate routes due to conditions on the regular route being such that flight is considered inadvisable, the weather conditions on the alternate route shall be equal to or better than those listed in the air carrier operating certificate for the particular alternate route.

(b) From alternate airports. Clearance of flights from an alternate airport over an unauthorized route to an airport on an authorized route shall not be permitted unless the flights can be made in accordance with the provisions of § 61.200.

## Would Limit Airline Use Of Unscheduled Ports

The Civil Aeronautics Board has under consideration an amendment to section 61.7211 of the "Scheduled Air Carrier Rules." If amended the section would read:

61.7211 Take-off from fields not designated as airports—No scheduled air carrier aircraft shall take-off with passengers from any field not designated as an airport and listed in the air carrier operating certificate.

In case of an emergency landing at an undesignated field the passengers could not continue in the same plane. Under the section, as it now stands, air carriers have been landing in fields which are not designated as airports, and taking off again with their passengers.

# AIR REGULATIONS STATUS

As of June 1, 1943

## HOW TO OBTAIN PARTS, AMENDMENTS, AND MANUALS

THOSE PARTS AND MANUALS ON WHICH A PRICE IS LISTED IN THE TABULATION WHICH FOLLOWS ARE ON SALE AT THE GOVERNMENT PRINTING OFFICE (SHOWN AS GPO IN TABLE), AND ARE NOT AVAILABLE FOR FREE DISTRIBUTION FROM THE CAA.

The Government Printing Office is the official sales agency for all government publications and is separate and distinct from the CAA and the Department of Commerce. The rules of the Superintendent of Documents require that remittances be made in advance of shipment of publications, either by coupons, sold in sets of 20 for \$1 and good until used, or by check or money order payable to the Superintendent of Documents, Government Printing Office. Currency is sent at sender's risk. Postage stamps, foreign money, and smooth coins are not acceptable. A discount of 25 percent is allowable to book dealers and quantity purchasers of 100 or more publications, on condition that the purchasers will adhere to the public sales price set by the Superintendent of Documents and that publi-

cations shall not be overprinted with any advertising matter.

Eventually, all Parts and Manuals will be placed on sale; meanwhile, those not yet on sale (carrying remark, "Order from CAA only") may be obtained without charge from the CAA upon demonstration of valid interest on the applicant's part.

The following tabulation carries in the right-hand column the numbers of all effective amendments to each Part and Manual issued subsequent to its publication. Parts and Manuals obtained from the CAA will include all effective amendments, but amendments for Parts and Manuals purchased from GPO must be requested separately from the CAA. When requesting amendments from the CAA, please be sure to state Part numbers for which they are desired.

ALL AMENDMENTS TO THE REGULATIONS, AND NOTICE OF NEW PARTS AND MANUALS ARE PRINTED IN THE CIVIL AERONAUTICS JOURNAL, AS RELEASED.

Bound volumes of the complete Civil Air Regulations are no longer available. Parts and amendments are punched for filing in standard three-ring binders.

For your guidance we have listed the Parts and Manuals applicable to the various airmen certificates issued.

## Pilots:

Parts 01, 20, 60, 501, 503, and Manual 60.

## Airline Transport Pilots:

Parts 01, 04, 21, 27, 40, 60, 61, 98, 501, 503, and Manuals 04 and 60.

## Lighter-Than-Air Pilots:

Parts 01, 22, 60, 501, 503, and Manual 60.

## Aircraft Mechanics:

Parts 01, 04, 15, 18, 24, 501, 503, section 60.32, and Manuals 04, 15, and 18.

## Aircraft Engine Mechanics:

Parts 01, 04, 13, 14, 18, 24, 501, 503, and Manuals 04, 14, and 18.

## Parachute Technicians:

Parts 15, 25, 54, 60, and Release 144.

## Air-Traffic Control-Tower Operators:

Parts 26, 60, and Manual 60.

## Aircraft Dispatchers:

Parts 27, 40, 60, 61, and Manual 60.

Ground Instructors (rating in Civil Air Regulations):

Parts 01, 20, 51, 60, 501, 503, and Manual 60.

## PARTS CANCELED AND UNASSIGNED

Canceled Parts 00 and 03 now incorporated in Part 501; canceled Part 23 now incorporated in Part 51. Parts 90-96, inclusive, canceled. All other Part numbers not shown are unassigned.

## Civil Air Regulations

### Aircraft

PART NO.	TITLE	DATE	REMARKS	PRICE	EFFECTIVE AMENDMENTS
01	AIRWORTHINESS CERTIFICATES.....	10-15-42	On sale at GPO.....	\$0.05	
02	TYPE AND PRODUCTION CERTIFICATES.....	3-1-41	On sale at GPO.....	.05	
04	AIRPLANE AIRWORTHINESS.....	8-15-42	On sale at GPO.....	.15	04-1, Reg. Ser. 228.
13	AIRCRAFT ENGINE AIRWORTHINESS.....	8-1-41	On sale at GPO.....	.05	
14	AIRCRAFT PROPELLER AIRWORTHINESS.....	7-15-42	On sale at GPO.....	.05	
15	AIRCRAFT EQUIPMENT AIRWORTHINESS.....	11-15-40	In stock; order from CAA only.....		15-1, 15-2.
16	AIRCRAFT RADIO EQUIPMENT AIRWORTHINESS.....	2-13-41	On sale at GPO.....	.05	
18	MAINTENANCE, REPAIR, AND ALTERATION OF CERTIFICATED AIRCRAFT AND OF AIRCRAFT ENGINES, PROPELLERS, AND INSTRUMENTS.....	9-1-42	On sale at GPO.....	.05	

### Airmen

20	PILOT CERTIFICATES.....	9-1-42	On sale at GPO.....	\$0.10	20-1, thru 20-5, Reg. Ser. 242, 247.
21	AIRLINE TRANSPORT PILOT RATING.....	10-1-42	On sale at GPO.....	.05	21-1, 21-2, Reg. Ser. 236, 251.
22	LIGHTER-THAN-AIR PILOT CERTIFICATES.....	10-15-42	On sale at GPO.....	.05	Reg. Ser. 247.
24	MECHANIC CERTIFICATES.....	10-1-42	On sale at GPO.....	.05	24-1, 24-2.
25	PARACHUTE TECHNICIAN CERTIFICATES.....	1-21-43	In stock; order from CAA only.....		
26	AIR-TRAFFIC CONTROL-TOWER OPERATOR CERTIFICATES.....	7-1-42	On sale at GPO.....	.05	26-1.
27	AIRCRAFT DISPATCHER CERTIFICATES.....	9-1-42	On sale at GPO.....	.05	27-1.
29	PHYSICAL STANDARDS FOR AIRMEN.....	6-1-42	On sale at GPO.....	.05	

### Air Carriers

40	AIR CARRIER OPERATING CERTIFICATION.....	11-1-42	On sale at GPO.....	\$0.10	40-1, 40-2.
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### Air Agencies

50	FLYING SCHOOL RATING.....	11-1-40	On sale at GPO.....	\$0.05	87, 113, 50-3, Reg. No. 216. <sup>1</sup>
51	GROUND INSTRUCTOR RATING.....	7-1-42	On sale at GPO.....	.05	
52	REPAIR STATION RATING.....	10-1-42	On sale at GPO.....	.05	
53	MECHANIC SCHOOL RATING.....	8-1-42	On sale at GPO.....	.05	
54	PARACHUTE LOFT CERTIFICATES AND RATINGS.....	1-21-43	In stock; order from CAA only.....		

### Air Navigation

60	AIR-TRAFFIC RULES.....	7-15-42	On sale at GPO.....	\$0.10	60-2 thru 60-18.
61	SCHEDULED AIR-CARRIER RULES.....	10-15-42	On sale at GPO.....	.10	61-1 thru 61-9.
66	FOREIGN AIR-CARRIER REGULATIONS.....	1-15-42	On sale at GPO.....	.05	

### Miscellaneous

97	RULES OF PRACTICE GOVERNING SUSPENSION AND REVOCATION PROCEEDINGS.....	10-1-42	In stock; order from CAA only.....		
98	DEFINITIONS.....	10-15-42	On sale at GPO.....	\$0.05	
99	MODE OF CITATION OF REGULATIONS.....	11-15-40	In stock; order from CAA only.....		

<sup>1</sup> No copies available. (Waiver of requirements.) Consult CAA inspector for specific provisions of this amendment.



## Regulations of the Administrator

PART NO.	TITLE	DATE	REMARKS	PRICE	EFFECTIVE AMENDMENTS
501	AIRCRAFT REGISTRATION CERTIFICATES.....	3-31-43	In stock; order from CAA only.....	-----	-----
503	RECORDATION OF AIRCRAFT OWNERSHIP.....	3-31-43	In stock; order from CAA only.....	-----	-----
510	GENERAL REGULATIONS, WASHINGTON NATIONAL AIRPORT.....	9-26-41	In stock; order from CAA only.....	-----	-----
511	GENERAL AERONAUTICAL RULES FOR THE WASHINGTON NATIONAL AIRPORT.....	9-26-41	In stock; order from CAA only.....	-----	-----
525	NOTICE OF CONSTRUCTION OR ALTERATION OF STRUCTURES ON OR NEAR CIVIL AIRWAYS.....	11-1-41	In stock; order from CAA only.....	-----	1.
531	SEIZURE OF AIRCRAFT.....	12-8-41	In stock; order from CAA only.....	-----	-----
532	REPRODUCTION AND DISSEMINATION OF CURRENT EXAMINATION MATERIALS.....	1-15-43	In stock; order from CAA only.....	-----	-----
600	DESIGNATION OF CIVIL AIRWAYS.....	3-1-42	Not published <sup>1</sup> .....	-----	1 through 21. <sup>1</sup>
601	DESIGNATION OF AIRWAY TRAFFIC CONTROL AREAS, ETC.....	1-15-42	Not published <sup>1</sup> .....	-----	1 through 27. <sup>1</sup>

## Civil Aeronautics Manuals

04	AIRPLANE AIRWORTHINESS.....	2-1-41	On sale at GPO.....	\$0.50	Release 50, 97, <sup>2</sup> 105, <sup>2</sup> 117, <sup>2</sup> 140. <sup>2</sup>
14	AIRCRAFT PROPELLER AIRWORTHINESS.....	12-1-38	In stock; order from CAA only.....	-----	-----
15	AIRCRAFT EQUIPMENT AIRWORTHINESS.....	7-1-38	On sale at GPO.....	.10	-----
16	AIRCRAFT RADIO EQUIPMENT AIRWORTHINESS.....	2-13-41	In stock; order from CAA only.....	-----	Release 62.
18	MAINTENANCE, REPAIR, AND ALTERATION OF CERTIFICATED AIRCRAFT AND OF AIRCRAFT ENGINES, PROPELLERS, AND INSTRUMENTS.....	6-1-41	On sale at GPO.....	.50	-----
50	FLYING SCHOOL RATING.....	12-40	In stock; order from CAA only.....	-----	Release 77,111.
52	REPAIR STATION RATING.....	2-41	In stock; order from CAA only.....	-----	-----
53	MECHANIC SCHOOL RATING.....	5-40	In stock; order from CAA only.....	-----	-----
60	AIR TRAFFIC RULES.....	11-15-42	On sale at GPO.....	.20	-----

<sup>1</sup> See Air Navigation Radio Aids.  
<sup>2</sup> Only pertinent pages furnished.

## Three Airlines Get New Routes In California

Transcontinental & Western Air, Inc., Western Air Lines, Inc., and United Air Lines Transport Corporation have been granted permission by the Board to establish additional north-south air service in California.

TWA was granted authorization to serve both Los Angeles and San Francisco on flights originating in Albuquerque, N. M., or points east of there, by amendment of its route No. 37 to include Los Angeles as an intermediate point between Las Vegas and Fresno. Although TWA is presently authorized to serve both San Francisco and Los Angeles, United is the only airline authorized to operate between San Francisco and Los Angeles.

Western was authorized to include San Bernardino, Calif., as an intermediate point on their route between San Diego and Long Beach. The airline had also applied for permission to operate between Los Angeles and El Centro via Palm Springs, Calif., but decision in this case was deferred pending decision in a case involving additional service east of San Diego which is now before the Board.

United Air Lines was granted permission to include Stockton, Modesto, Merced, and Visalia, Calif., as additional local points on its route between San Francisco and Los Angeles.

Operation of the new routes is not effective until such time as the national defense no longer requires a delay in the inauguration of the service, the Board said.

## Toombs Appointed Board Secretary

The Civil Aeronautics Board has announced the appointment of Fred A. Toombs as Secretary of the Board replacing Darwin Charles Brown who resigned to become Chief of the Office of Air Transport Information.

Mr. Toombs formerly served as acting secretary and previously was administrative officer of the Board's Economic Bureau.

Actively connected with aviation since 1924, Mr. Toombs has served as chief clerk of the Eastern Division of the United States Air Mail Service, as supervisor of the New York-Chicago Lighted Airway, and as manager of Hadley Airport, New Jersey, when it was the New York terminal of transcontinental air transport operations.

Subsequently he became associated with the Curtiss Airports Corporation, later serving as purchasing agent of the Eastern Division of American Airways, Inc., and prior to joining the Civil Aeronautics Board he was connected with the Bureau of Air Mail, Interstate Commerce Commission.

## Opinion 48 Printed

Opinion 48, "Pan American Airways, Inc., et al.—Pan American-Matson-Inter-Island Contract," Docket No. 544, is available in printed form as an advance sheet prior to its inclusion in Volume 3 of the Civil Aeronautics Board. A copy of this opinion may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 5 cents. When ordering, be sure to include the opinion serial number and the docket number as well as the opinion title.

## Moving Companies Want the Right Of Air Transport

Transportation of uncrated new furniture and household goods by air is proposed by the Great Lakes Storage and Moving Co., Cleveland, Ohio, in a recent application filed with the Board.

The company offers a public-call service to all points in the United States and Alaska in unscheduled operations over irregular routes. In addition to household goods, it proposes to handle furniture, fixtures, equipment, and property of stores, offices, museums, institutions, and hospitals; objects of art, displays and exhibits which because of their unusual nature or value might require special handling.

All types of aircraft would be used and would be acquired by lease or purchase. The company is now engaged in the transportation of household goods by motor vehicle.

An earlier application for transferring operations to the air was made by W. J. Dillner Transfer Co., Pittsburgh, Pa., another company engaged in moving equipment by trucks. This company has plans for moving household furnishings, office furniture and equipment and machinery with cargo airplanes and gliders. It has asked permission to conduct air transportation between the airports in or near Pennsylvania, and also in several states, Alaska, and the District of Columbia.

## Serve Military Planes

Seventeen of every 20 airplanes guided along the nation's "aerial highways" by CAA's navigation aids and traffic men are military aircraft.



